

METHOD OF AND SYSTEM FOR FAULT-TOLERANT INDEXING

ABSTRACT OF THE DISCLOSURE

The dictionary entry is stored in the fifteen combinations formed by the central index and five adjacent decoding spheres. A data dictionary uses a reverse error correction code to identify near matches. A preferred embodiment of the data dictionary utilizes pairwise combinations of a central index decoding sphere and all adjacent decoding spheres (each identified as a vector defining the center of the decoding sphere) to form sets of hash indices into which a dictionary entry is stored. Thus, in the case of dictionary entries at a distance two from the center of a particular central index decoding sphere, the twenty-one adjacent decoding spheres are located and identified by their respective center points or vectors describing the center points of these spheres. In the case of dictionary entries at a distance three, five adjacent decoding spheres are identified. The dictionary entry is stored (or searched for) in the twenty-one combinations formed by a lexicographic ordering of pairs of the central index decoding sphere with the twenty-one adjacent decoding spheres. Likewise, in the case of distance three entries.

25020199.4

187	188	189	190	191	192	193	194	195	196	197	198	199	200
187	188	189	190	191	192	193	194	195	196	197	198	199	200